## CLAIMS

1. A method of printing parallel rows of contiguous pixels on a substrate indexed in a direction orthogonal to the rows, comprising the steps of printing for each row of pixels, N superimposed rows of contiguous super pixels, each print pixel being capable of receiving print contributions from N super pixels.

2. A method according to Claim 1, wherein each super-pixel is elongated in the row direction with an aspect ratio of N:1.

3. A method according to Claim 1 or Claim 2, wherein each of the N superimposed rows of contiguous super pixels is offset in the row direction with respect to each of the other superimposed rows.

4. A method according to Claim 3, wherein the distance of said offset is 1/N of the dimension of the super pixel in the row direction.

5. A method according to any one of the preceding claims, wherein N = 2 or 3.

6. A method according to any one of the preceding claims, wherein print data is received in the form of an array of print data pixels and wherein the value of each super pixel is derived as a weighted sum of corresponding data pixels.

7. A method according to Claim 6, in wherein each super pixel is symmetrically disposed with respect to print data pixels.

8. A method according to Claim 6 or Claim 7, in which the value of each super pixel is derived as a weighted sum of at least three corresponding data pixels.

9. A method according to any one of Claims 6 to 8, in which at least one of the weighting coefficients applied to the corresponding data pixels in said weighted sum is negative.

10. A method according to any one of Claims 6 to 9, in which every super pixel is derived as a weighted sum of different corresponding data pixels.

11. A method according to any one of the preceding claims, wherein the printability of each super-pixel is measured, and the contribution to those pixels covered by that super-pixel is transferred wholly or in part to one or more other super-pixels from which those pixels are capable of receiving print contributions in accordance with any measured deviation in printability of that super pixel.

12. A method according to Claim 11, wherein an error in printability is measured for each super pixel and wherein the determination of the value of each super pixel includes a function of measured error in printability.

13. A method according to Claim 12, in which said function is polynomial.

14. A method according to Claim 13, in which said polynomial function includes terms to at least the third power.

15. A method according to any one of the preceding claims in which the N superimposed rows of super pixels are printed in a single pass.

16. A method according to any one of the preceding claims, wherein the desired print density for each print pixel is distributed amongst those super-pixels from which the pixel is capable of receiving contributions.

17. A method according to Claim 16, wherein said desired print density is greater than that achievable by a single super pixel.

18. A method according to Claim 16 or Claim 17, wherein said distribution serves to compensate for measured differences in the print weight between super-pixels in each row of super-pixels.

19. A method according to Claim 16, wherein the print weight of each contributing super pixel is between 0% and 100% of said desired print density.

20. A method according to any one of the preceding claims in which each super pixel is printed as a plurality of ink droplets from an ink jet printer.

21. An ink jet printer having a plurality of ink chambers each provided with a nozzle arrangement, the plurality of ink chambers being arranged so as to print on a substrate a row of contiguous print elements, the nozzle arrangement of each ink chamber being such that the print element associated with that ink chamber is elongated in the row direction with an aspect ratio of at least 2:1.

22. An ink jet printer according to Claim 21, wherein at least two sets of ink chambers are provided, each set being arranged so as to print a row of contiguous print elements, the rows of contiguous print elements printed by the respective sets of ink chambers being superimposed.

23. An ink jet printer according to Claim 21 or Claim 22, wherein the print elements of one set of ink chambers is offset in the row direction with respect to the print elements of another set of ink chambers.

24. An ink jet printer according to Claim 23, wherein the offset is the reciprocal of the aspect ratio.

25. A method of printing a representation on a print medium of an array of print data pixels comprising the steps of distributing print data from said array of print data pixels over an array of super pixels in a distribution function such that each super pixel receives a print data contribution from at least two print data pixels and each print data pixel contributes print data to at least two super pixels; and forming print pixels on the medium such that each print pixel receives print contribution from at least two super pixels.

26. A method according to Claim 25, wherein each super pixel receives a print data contribution from at least three print data pixels.

27. A method according to Claim 26, wherein the print data contribution varies in sign between said print data pixels.

28. A method according to any one of Claims 25 to 27, wherein the at least two super pixels from which a print pixel receives print contribution, receive print data contributions from different combinations of print data pixels.

29. A method according to any one of Claims 25 to 28, further comprising the step of measuring the print efficiency of each super pixel.

30. A method according to Claim 29, wherein said distribution function includes the measured print efficiency.

31. A method according to any one of Claims 25 to 30, wherein the step of forming print pixels on the medium such that each print pixel receives print contribution from at least two super pixels comprises the steps at each print pixel of depositing ink in an amount determined by one of the super pixels from which that print pixel receives print contribution and, whilst that deposited ink remains fluid, depositing ink in an amount determined by an other of the super pixels from which that print pixel receives print contribution.

32. A method according to Claim 31, wherein the ink is deposited by ink jet printing.

33. A printer comprising an input port adapted to receive an array of print data pixels; a print arrangement for forming overlapping super pixels on a print medium and a print processor adapted to distribute print data from said array of print data pixels over the super pixels in a distribution function such that each super pixel receives a print data contribution from at least two print data pixels and each print data pixel contributes print data to at least two super pixels.

34. A printer according to Claim 33, wherein each super pixel receives a print data contribution from at least three print data pixels.

35. A printer according to Claim 34, wherein the print data contribution varies in sign between said print data pixels.

36. A printer according to any one of Claims 33 to 35, further comprising a store adapted to hold a measured print efficiency for each super pixel and wherein said distribution function includes the measured print efficiency.

37. A printer according to any one of Claims 33 to 36, wherein the super pixels are formed by ink jet printing.